

HDCAM**J-H1/J-H3**

HIGH DEFINITION VIDEO SYSTEM

With the widespread use of HDCAM camcorders and studio VTRs in the high-definition field and post production, it was inevitable that producers, journalists and others involved in the programme production chain would be demanding cost-effective HDCAM viewers that can readily be used in production environments.

Sony provides the solution by introducing the J-H Series Compact Players in two models – the J-H1 and the J-H3.

Sharing the same design philosophy and physical dimensions of the existing J Series standard-definition compact players, both the J-H1 and J-H3 are affordable, compact, lightweight and offer the same low-power consumption characteristics.

While the J-H1 is ideal for viewing HDCAM playback at 59.94i, 50i, 25P, and 29.97P, the J-H3 is equipped with a number of additional features to support 24P playback and is ideally suited for feeding nonlinear editors, as well as viewing and scene selection.

Common Features

- Compact Body Design
- Replay of Both Small and Large Cassettes
- HDCAM™ Playback Capability
- Flexible Audio Outputs
- HD and SD Outputs
- Down Conversion Capability
- RGB Computer Display Interface
- i.LINK Interface (Option)
- Tele-File™ System

Compact Body Design

Sharing a similar chassis design to the existing J Series multi-format compact players for standard-definition formats, both the J-H1 and J-H3 retain a compact and lightweight design. Equivalent in size to a standard desktop PC, they can be effortlessly placed on the desks of busy producers, directors and editors.

The J-H1 and J-H3 players are just 307 x 100 x 397 mm (12 1/8 x 4 x 15 3/4 inches) in size and weigh only 7.5 kg (16 lb 9 oz). They can be used horizontally or placed upright with the supplied vertical stand, allowing operators to locate players as desired even in space-constrained or awkward environments. Easy control is assured with the supplied infra-red remote controller.

Replay of Both Small and Large Cassettes

Despite their very compact designs, the J-H1 and J-H3 can playback both large and small size cassettes.

HDCAM – Playback Capability

Both the J-H1 and J-H3 have the capability to playback HDCAM cassettes that are recorded in 1080/59.94i, 50i and 1080/29.97P, 25P formats – primarily used in high-definition television production applications. The J-H3 has the additional capability to playback 1080/23.98, 24P formats to address the movie-making industry, and high-end television and commercial productions.

CHANGING

THE WAY

BUSINESS

COMMUNICATES

COST-EFFECTIVE FLEXIBLE MONITORING



Flexible Audio Outputs

Both the J-H1 and J-H3 provide two channels of analogue audio output, available either from the XLR connectors or RCA phono jacks located on the rear panel. A headphone jack is also provided on the front panel. The audio channels to be output to the analogue outputs and headphone jack can be selected from Ch 1/2, Ch 3/4, and Cue track. Audio is automatically muted for off-speed playback and non-data playback.

Additional Features of J-H3 Extending Applications in Post Production

In addition to their common playback capability of 1080 progressive formats, HD-SDI and SD-SDI outputs, the J-H3 offers the following features:

- Reference input (HD/SD switchable)
- RS-422A
- Time code output
- Pull down function to convert 23.98P to 1080/59.94 and 525/59.94i

HD and SDI Outputs – For Connection to High Grade Monitors

The J-H1 and J-H3 both come equipped with an analogue Y/Pb/Pr component output (BNC x 3) for connection to an HD picture monitor. The J-H3 additionally offers HD-SDI and SD-SDI outputs giving a choice of high quality monitoring and work-tape copying. (AES/EBU audio and non audio data are embedded in these digital outputs.)

Down Conversion Capability Built-in – Connectivity with SDTV Monitors

Both the J-H1 and J-H3 have a built-in down conversion capability, offering NTSC or PAL composite video output from the BNC and RCA output connectors. With this capability, HDCAM-originated content can be viewed on both SDTV professional and consumer monitors.

RGB Computer Display Interface – For Connection to Computer Displays

Equipped with an RGB computer display interface, both the J-H1 and J-H3 can output HDCAM-originated content to a computer display, at XGA resolution. (As the pixel count of an XGA display is 1024 x 768, the HDCAM image will be “letter-boxed” to 1024 x 577 pixels in the centre.) Alternatively, when large screen viewing is preferred, the player can be connected to an XGA capable data projector.

Tele-File™ System

Another important option to increase editing efficiency is the Sony Tele-File system, a non-contact read/write system for storing production-related data on an I/C memory embedded in a 1/2-inch cassette label. Connecting a PC running JZ-1 Videocassette Logging Software to the J-H1 and J-H3 allows information to be read and written to a Tele-File label (option: MLB-1M-100) via GUI-based operations.

i.LINK* Interface – ‘Single-Cable’ Transmission of Video, Audio, and Time Code

When equipped with the optional HKJ-101 i.LINK interface board, both the J-H1 and J-H3 can down-convert the HDCAM signal to a DV signal, in which video, audio and time code are transferred through a single i.LINK interface cable. This DV-output capability allows the J-H1 or J-H3 to be connected to a DVCAM deck for straight dubbing of HDCAM material to DVCAM tape**. It also allows a direct connection to DV-based nonlinear editors.

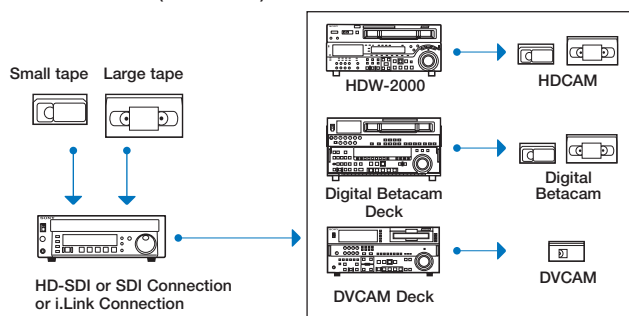
* i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary depending on the software applications, operating system and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Please refer to the documentation that comes with any device having an i.LINK connection for information on compatibility, operating conditions and proper connection.

** Assemble or Insert editing functions can not be used.

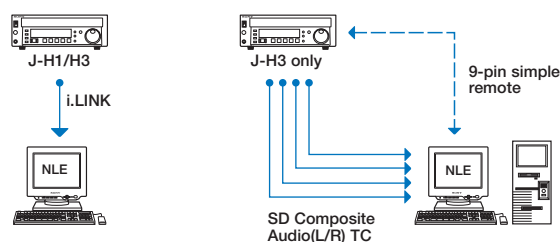


System Configurations

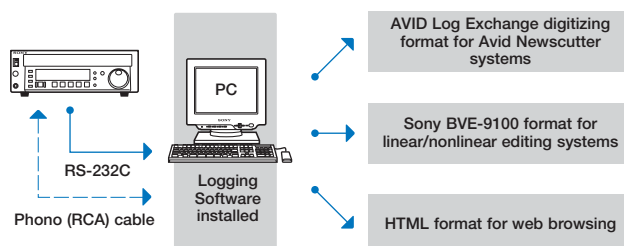
SIMPLE DUBBING (J-H3 ONLY)



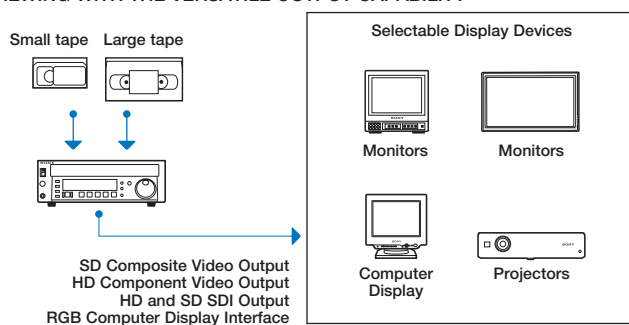
SOURCE FEEDING TO NLE



LOGGING



VIEWING WITH THE VERSATILE OUTPUT CAPABILITY



Comparison Chart

	J-H1	J-H3
HD Component out	yes	yes
HD-SDI out	no	yes
Downconverter	yes	yes
Composite out	yes	yes
SDI out	no	yes
Computer Display out	yes	yes
i.Link out	option	option
Analogue audio out	yes	yes
Input reference HD/SD	no	yes
RS-232	yes	yes
RS-422	no	yes
Time code out	no	yes
Infra red control	yes	yes
25P/50i playback	yes	yes
29.97P/59.94i playback	yes	yes
23.98P/24P playback	no	yes
Pull down option	no	yes
Timecode conversion	yes	yes
CineAlta logo	no	yes



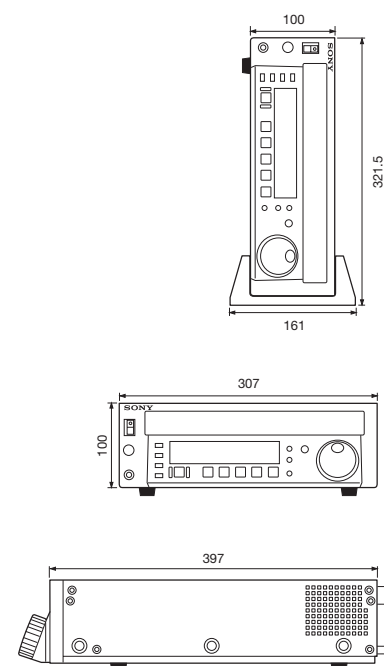
J-H1/J-H3 can be placed vertically to economise space.

J-H1/J-H3 SPECIFICATIONS

J-H1		J-H3	
GENERAL			
Power requirements		AC 100 V to 240 V 50/60 Hz	
Power consumption		50 W	60 W
Operating temperature		+5 °C to +40 °C (+41 °F to +104 °F)	
Storage temperature		-20 °C to +60 °C (-4 °F to +140 °F)	
Humidity		25 % to 80 % (relative humidity)	
Mass		7.5 kg (16 lb 9 oz)	
Dimensions (W x H x D)		307 x 100 x 397 mm (12 1/8 x 4 x 15 3/4 inches)	
Tape speed	HDCAM	96.7 mm/s (29.97 Hz), 80.7 mm/s (25 Hz)	96.7 mm/s (29.97 80.7 mm/s (25 Hz) 77.4 mm/s (24 Hz)
Playback time		124 min (29.97 Hz, with BCT-124HDL) 149 min (25 Hz, with BCT-124HDL)	124 min (29.97 Hz, with BCT-124HDL) 149 min (25 Hz,with BCT-124HDL) 155 min (24 Hz, with BCT-124HDL)
Fast forward / Rewind time		Approx. 6 min with BCT-124HD	
Search speed	Shuttle mode	Still to ± 21 times normal speed playback	
	Jog mode	Still to ±1 time normal speed playback	
Servo lock time		1 sec or less (from standby on)	
Load/unload time		7 sec or less	
INPUT/OUTPUT			
Digital HD video		–	BNC x 1, SMPTE-292M
Digital SD Video		–	BNC x 1, SMPTE-259M
Analogue HD video		BNC (x 3) Y: 0.7 vp-p, Pb/Pr: ±0.7vp-p 75 Ω EIAJ RC-5237 connector, EIAJ CP-4120 standard	
Analogue SD video		BNC (x 1), Pin jack (x 1), 1.0 Vp-p, 75 Ω	
Computer display		D-sub 15 pin, XGA (1024 x 768 dots), RGB, 0.7 V	
i.LINK (Optional)		IEEE1394	
Timecode		–	BNC x 1, SMPTE 12M
Audio monitoring		Pin jack (x 2): -10 dBu at 47 kΩ load, unbalanced XLR (male x 2) +4 dBm, 600 Ω load, low impedance, balanced	
Headphone		JM-60 stereo phone jack, ∞ to -12 dBu at 8 Ω , unbalanced	
RS-232C		D-sub 9 pin male (x 1)	
RS-422		–	D-sub 9 pin female (x 1), Sony 9-pin remote interface
Wireless remote		BIRCS	
EXT SYNC		–	BNC x 2
HD ANALOGUE RESPONSE			
Output level		Y: 700 mV (±5 %), Pb/Pr: 700 mV (±5 %), Sync signal: 300 mV (±5 %)	
Bandwidth		Y: 0 to 20 MHz + 1.0 dB / -3.0 dB , Pb/Pr: 0 to 7 MHz +1.0 dB / -3.0 dB	
S/N ratio		56 dB or more	
Output impedance		Y, Pb, Pr: 75 Ω (±5 %)	
Y/C Delay		Y, Pb, Pr: ±15 nsec or less	
XGA ANALOGUE RESPONSE			
Output level		R: 700 mV (±5 %), G: 700 mV (±5 %), B: 700 mV (±5 %)	
Resolution		XGA	
Refresh/rate		60 Hz	50 Hz
H-Frequency		48.4 kHz	
SD COMPOSITE RESPONSE			
Output level		Y: 59.94i: 714 mV (±5 %), 50i: 700 mV (±5 %) Sync: 59.94i: 286 mV (±5 %), 50i: 300 mV (± 5%) Burst: 59.94i: 286 mV (±5 %), 50i: 300 mV (±5 %)	
Bandwidth		0.5 to 5.75 MHz + 0.5 dB/-3.0 dB	
S/N ratio		56 dB or more	
Y/C delay		20 nsec or less	
K Factor (2T Pulse)		1.0 % or less	
ANALOGUE AUDIO RESPONSE			
Output level		XLR: +4±0.5 dBm, -20 dBFS, 600 Ω terminated PIN: +10±0.5 dBu, -20 dBFS, 47 kΩ terminated	
Frequency response		20 Hz to 20 kHz + 1.0 dB/-1.5 dB	
Dynamic range		More than 85 dB (at 1 kHz, emphasis ON)	
Distortion		Less than 0.1 % (at 1 kHz/-20 dBFS, emphasis ON)	
Wow & flutter		Below measurable level	
CUE AUDIO RESPONSE			
Sampling frequency		100 Hz to 10 kHz ±3.0 dB	
S/N ratio		More than 43.5 dB (3 % distortion level)	
Distortion		Less than 2 % (T.H.D. at 1kHz, reference level)	
Wow & flutter		Less than 0.18 %	
SUPPLIED ACCESSORIES			
	Operation manual (CD-ROM), Quick operation guide, Vertical stand (x 2), Infra-red remote controller		



DIMENSIONS (unit: mm)



Sony address/contact details/dealer stamp

SONY

www.sonybiz.net

SONY BUSINESS EUROPE

Sony is a registered trademark of the Sony Corporation, Japan.
Design, features and specifications are subject to change without notice.

All non-metric weights and measures are approximate.
CA J-H1/J-H3/GB- / /2003